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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,011	02/14/2002	Jacob Y. Wong	JCJYWSLPF	6659
7590 12/08/2004			EXAMINER	
JAMES F. COTTONE			KIM, CHONG R	
Suite 403			ART UNIT	
Crystal Plaza One			PAPER NUMBER	
2001 Jefferson Davis Highway			2623	
Arlington, VA 22202			DATE MAILED: 12/08/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/074,011

**Applicant(s)**

WONG, JACOB Y.

**Examiner**

Charles Kim

**Art Unit**

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,7 and 9-11 is/are rejected.
- 7) ☒ Claim(s) 2-6 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Objections***

The following quotations of 37 CFR § 1.75(a) is the basis of objection:

(a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

1. Claim 8 is objected to under 37 CFR § 1.75 (a) as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery.

Referring to claim 8, the phrase “said four bidirectional scans” in 2 lacks antecedent basis. It appears that the applicant intended the phrase to read “four bidirectional scans”.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 10, the phrase “said at least two scans” in line 2 renders the claim indefinite because it is unclear which two scans (scans generating the reference set or scans generating the candidate set) are being referred to.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 7, 9, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Gagne et al., U.S. Patent No. 5,363,543 (“Gagne”).

Referring to claim 1, Gagne discloses a method of authenticating the identity of an individual employing a preselected sequence of linear partial fingerprint signatures comprising the steps of:

a. obtaining a reference set of linear partial fingerprint signatures (comparison data matrix) and storing an electronic representation of the reference set in a comparison means (col. 17, lines 39-51), the reference set derived from two or more scans taken across predetermined paths on an individual’s fingerprint (col. 11, line 1-col. 13, line 43. Note that the comparison data matrix is derived from the data matrix in col. 13, lines 15-35, wherein each element of the matrix is determined from scans taken across predetermined paths on the individual’s fingerprint, see figures 12-23);

b. generating a candidate set of linear partial fingerprint signatures (generated data matrix) and applying an electronic representation of the candidate set to a comparison means (col. 14, lines 60-65), the candidate set derived from at least two scans taken across corresponding predetermined paths on that individual’s fingerprint (col. 11, line 1-col. 13, line

Art Unit: 2623

43 and figures 12-23), the particular two of the at least two scans and the sequence of their application to the comparison means being selected so as to serve as a personal code [col. 13, lines 30-35. Note that the sequence of each scan (element of the matrix) serves as a personal code];

c. providing a comparison means for comparing the reference and candidate sets and for providing an affirmative response for a successful comparison and a negative response for an unsuccessful comparison (col. 14, line 60-col. 15, line 40).

Referring to claim 7, see the rejection of claim 1 above.

Referring to claim 9, Gagne further discloses that the comparison means is included in a microprocessor embedded within an identification/credit card (col. 15, lines 53-65).

Referring to claim 11, see the rejection of claim 1 above.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Gagne et al., U.S. Patent No. 5,363,543 ("Gagne") and Mainguet, U.S. Patent No. 6,459,804 ("Mainguet").

Art Unit: 2623

Referring to claim 10, Gagne does not explicitly disclose that the generating means comprises a single element optical sensing device and the at least two scans are taken while the individual's fingerprint is moved across the sensing device. However, this feature was exceedingly well known in the art. For example, Mainguet discloses a single element (10) optical sensing device for producing multiple scans while an individual's fingerprint is moved across the sensing device (figure 1).

Gagne and Mainguet are combinable because they are both concerned with fingerprint imaging systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the generating means of Gagne so that it comprises a single element optical sensing device as taught by Mainguet. The suggestion/motivation for doing so would have been to reduce the size of the sensor and provide a major reduction of its cost of manufacture (Mainguet, col. 3, lines 27-30). Therefore, it would have been obvious to combine Gagne with Mainguet to obtain the invention as specified in claim 10.

#### ***Allowable Subject Matter***

5. Claims 2-6, 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2623

a. Lin et al., U.S. Patent No. 6,393,139 discloses a method for fingerprint authentication based on an input sequence of fingerprint scans.

b. Martinez et al., U.S. Patent No. 6,483,932 discloses a fingerprint imaging method that obtains fingerprint image information based on bidirectional scans (figure 6)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Kim whose telephone number is 703-306-4038. The examiner can normally be reached on Mon thru Thurs 8:30am to 6pm and alternating Fri 9:30am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ck

November 23, 2004

  
Jon Chang  
Primary Examiner